

W. S. THOMAS.

Stove Grate.

No. 111,493.

Patented Jan. 31, 1871.

Fig. 1.

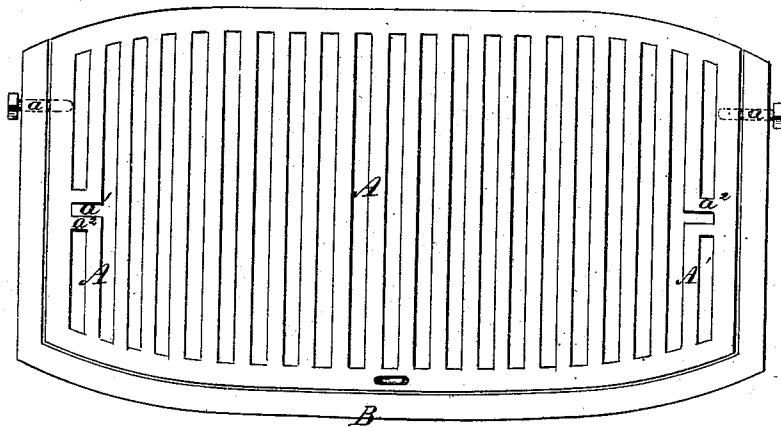


Fig. 2.

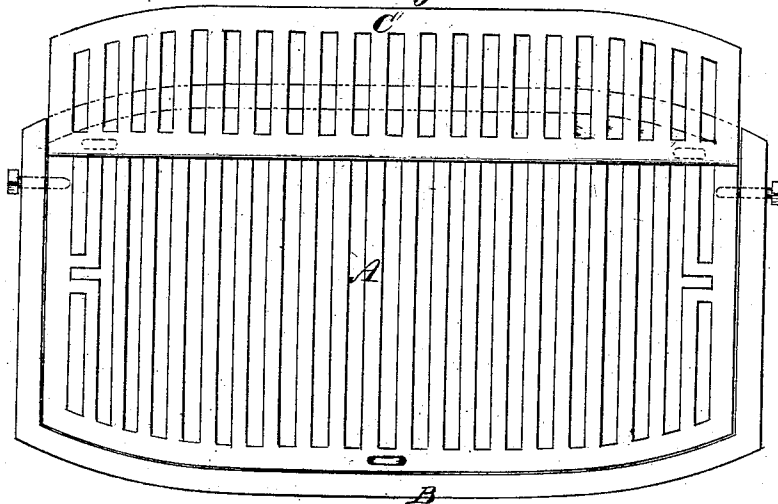
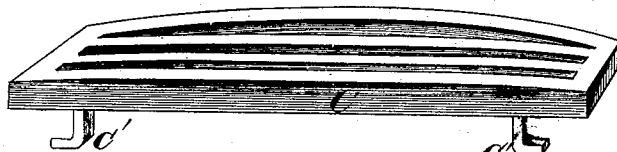


Fig. 3.



Witnesses:
A. Ruppert
C. Clausen

W. S. Thomas
Inventor.
D. L. Holloway & Co
Atty.

United States Patent Office.

WILLIAM S. THOMAS, OF KENDALLVILLE, INDIANA.

Letters Patent No. 111,493, dated January 31, 1871

IMPROVEMENT IN STOVE-GRATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern.

Be it known that I, WILLIAM S. THOMAS, of Kendallville, in the county of Noble and in the State of Indiana, have invented a new and useful Improvement in Extension Stove-Grates; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the main grate.

Figure 2 is a plan view of the same with one extension section attached.

Figure 3 is a perspective view of an extension section.

The same letters of reference are employed in the several figures of the drawing.

The object of this invention is to provide an extension-grate adapted to varying sizes of fire-boxes of wood-stoves, which are now usually sold in the market without grates; and consists

First, in the construction of the grate as a new article of manufacture, and in its combination with the extension sections when the latter are secured to it in a manner hereinafter to be more fully set forth, to permit of the removal of the ashes from under it.

Secondly, in the means provided for connecting the extension sections and main grate together, which consist in a slot formed at each end of the main grate, about midway between its sides, and two bent bars secured to the under side of the extension section to enter the slots in the grate, and project with their horizontal portions under one of the bars of the latter at each end, to secure the extension section in sliding it outward.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The main grate A and frame B, in which it is hung, are to be made to correspond in size with the fire-box of the smallest size wood-stove usually manufactured, and in outline should also conform to that of the fire-box.

The form most usually adopted will be that shown in the annexed drawing, as the modern styles of stoves for burning wood mostly embody or necessitate this form of fire-box.

The frame B is provided with feet to raise it a short distance above the base-plate of the fire-box, and thus form an ash-pit under the grate. The latter is pivoted in the frame at *a a*, near one side, so that it may

be turned up to facilitate the removal of the ashes. This hinged feature of the grate is especially desirable where the stove has a door at the end only.

The bars of the grate are arranged transversely, and the last bar *A'* at each end is interrupted at about the middle to form a slot, *a'*.

To strengthen these bars they may be connected, at *a''*, to the ends of the grate, as shown.

The extension sections *C* are about equal in length to the main grate, and of any required width. Near each end and the inner side, each section is constructed with a bent bar, *C'*, projecting from the under side.

In attaching the sections the horizontal part of these bars enters the slots *a'* in the bars *A'* of the main grate, their vertical portions, which enter the spaces between the bars *A'* and the next succeeding bar of the grate, being of a length equal to the thickness of the grate-bars, so that the horizontal end of *C'* may enter under the bars *A'* in sliding the sections outward to extend the capacity of the grate. When thus extended the sections will be firmly held in a horizontal position on the main grate by means of these bent bars *C'*.

I am aware that in coal-stoves grates have been hinged or pivoted centrally in a surrounding frame, so that they might be turned to discharge the unconsumed fuel resting upon them into the ash-pit. I do not therefore claim, broadly, a grate hinged in a frame.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, the grate for wood-stoves herein described, composed of the frame B, having supporting-feet, and the grate A, which is hinged to the former at *a a*, near one side, and constructed with slots *a' a'*, to permit of the attachment of extension sections, substantially as set forth.

2. The combination of the frame B, grate A, constructed with slots *a' a'* and hinged to the former at *a a*, and extension sections *C*, provided with downwardly-projecting bent bars *C'*, for attachment to the main grate to form an extension-grate for wood-stoves, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM S. THOMAS.

Witnesses:

C. E. SHULZE,
E. H. SHULZE.